



Date: 4/16/51

Technical Standard Order

Subject: TSO-C20 Amendment-1, COMBUSTION HEATERS

This amendment forms a part of and should be attached to Technical Standard Order TSO-C20, dated June 15, 1949. The purpose in issuing this amendment is to amend the "Directive" and "Data Requirements" sections of the Order.

DIRECTIVE

Provision. The requirements for combustion heaters, as set forth in SAE Aeronautical Standard AS143B; Heaters, Airplane, Internal Combustion Heat Exchanger Type, dated February 1, 1949, are hereby established as minimum safety standards for combustion heaters intended for use in civil aircraft, except that for the purpose of this Technical Standard Order paragraphs 4.4.3 and 6.4 pertaining to radio interference requirements may be deleted.

Application. Combustion heaters complying with the specifications appearing in this Order are hereby approved for all aircraft. Heaters already approved by the Administrator may continue to be installed by the aircraft manufacturer in production aircraft: -

- (1) for which an application for original type certificate is made prior to the effective date of this Order;
 - (2) the prototype of which is flown within one year after the effective date of this Order;
- and
- (3) the prototype of which is not flown within one year after the effective date of this Order if due to causes beyond the applicant's control.

If an alteration or replacement involving a change in type or model of heater or if an original installation in an individual airplane is made within nine months after the effective date of this Order, previously approved types of heaters may be installed. However, in any such change or original installation made after the nine-month period, heaters installed shall meet the specifications contained herein unless the aircraft model is still in production and the installation is identical to the approved factory installation.

Data Requirements. Add Item 9 to read as follows: - “9. List of the fuel system, ignition system, and safety control components necessary for safe heater operation, which have been determined to be satisfactory in accordance with the criteria established in Section 6 of specification AS-143B. The components shall be identified by the manufacturer’s name and part number.”

/S/ Donald. W. Nyrop
Administrator of Civil Aeronautics